



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
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Top sheet

D412-711-021
Job Sheet 194032



Part No: D412-711-021

Job Qty: 1 pcs

Part Name: Vertical Reference Door Modification LH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 4/25/19

Job Tracking No:

Due Date: 5/24/19 *May 30*

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG REV L IPP Rev:A 11.04.07 new issue DD ver:EC IPP Rev:B 14.04.25 ECN14-548 DD ver:JLM

Ship Via:

Bill of Materials

Job Routing

					Standard		Workcenter/Supplier		JUN 11 2019 Sign-off	
Op No	Operation	Qty	Start Date	Due Date	Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time		
120	Packaging 1 - Pick Kit	1 pcs		5/2/19	0.00	0.00	Packaging 1 - 1			
							Packaging 1 - 2			
							Packaging 1 - 3			
							Packaging 1 - 4			
							Packaging 1 - 5			
							Packaging 1 - 6			
							Packaging 1 - 7			
							Packaging 1 - 8			
							Packaging 1 - 9			
							Packaging 1 - 10			
							Packaging 1 - 11			
							Packaging 1 - 12			
							Packaging 1 - 13			
							Packaging 1 - 14			
							Packaging 1 - 15			
							Packaging 1 - 16			
							Packaging 1 - 17			
							Packaging 1 - 18			
							Packaging 1 - 19			
							Packaging 1 - 20			
							Packaging 1 - 21			
							Packaging 1 - 22			
							Packaging 1 - 23			
							Packaging 1 - 24			
							Packaging 1 - 25			
							Packaging 1 - 26			
							Packaging 1 - 27			
							Packaging 1 - 28			
							Packaging 1 - 29			
							Packaging 1 - 30			
							Packaging 1 - 31			

RT
SPACE

No: S203601

- 711-021

4032

atch: S203601

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TC SH92-30 Issue 3, TC SH92-54 Issue 4, TC SH92

JUN 11 2019
Sign-off



Container No: S203601



Part: D412-711-021

Job No: 194032

Serial No/Batch: S203601

Revision:

Inspector:

Exp Date:

Instructions: TC STC SH92-30 Issue 3, TC STC SH92-54 Issue 4, TC STC SH92

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					Packaging 1 - 32	
					Packaging 1 - 33	
					Packaging 1 - 34	
					Packaging 1 - 35	
					Packaging 1 - 36	
130 QC 4	1 pcs	5/2/19	0.00 0.00		QC 4 - 28	
					QC 4 - 58	
					QC 4 - 69	DAS
					QC 4 - 9	75
					QC 4 - 46	9-89
					QC 4 - 68	8/14/2019
150 Packaging 3-1 - Stock - B4B	1 pcs	5/2/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	DAS
					Packaging 3 - 8 - B4B	75
					Packaging 3 - 9 - B4B	9-89
					Packaging 3 - 10 - B4B	8/14/2019
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	DAS
155 DC - 1 - B4B	1 pcs	5/2/19	0.00 0.00		DC - 1 - B4B	21
					DC - 2 - B4B	9-89 AUG 14 2019
160 QC 21 - FG	1 pcs	5/2/19	0.00 0.00		QC 21 - FG - 21	DAS
					QC 21 - FG - 70	21
					QC 21 - SA - 53	9-89 AUG 14 2019

Part Op 120 - (Pick Kit)

Descriptions: 130 - (QC4- 100% Inspect kits for completeness)

150 - (Identify as per dwg & Stock Location: _____) Identify and pack for shipping as per PPP D412-711-021

Location: _____ PPP rev: _____

155 - (Document Control) Photocopy bluefiles and create labels per PPP D412-711-021 CHG002

160 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN3-12A	Bolt	1 Ea (1 ea)	120-Packaging 1 - Pick Kit	5133167
AN3-3A	Bolt	22 Ea (22 ea)	120-Packaging 1 - Pick Kit	5183164
AN3-4A	Bolt	20 Ea (20 ea)	120-Packaging 1 - Pick Kit	5149178
AN3-6A	Bolt	26 Ea (26 ea)	120-Packaging 1 - Pick Kit	5149179
CR3242-4-2	Rivet	34 Ea (34 ea)	120-Packaging 1 - Pick Kit	5049836
D3802-1-120	Window Seal - 120"	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5189628
D4165-1	Doubler	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5046740
D4165-11	Door Cover Panel	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5052205
D4165-3	Inner Door Panel	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5053885
D4165-5	Aft Rib	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5195340
D4165-7	Fwd Rib	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5195352
D4165-9	Angle	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5195264
D4207-1	Window Retainer	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5052320
D4207-3	Instrument Window	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5124912
D4269-1	Angle	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5051273
D4269-3	Angle	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5153385
D4269-5	Angle	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5153516
D4269-7	Angle	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5158780
D4324-011	Armrest Assembly	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5164573
D4327-1	Angle	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5163498
D4327-3	Angle	1 pcs (1 ea)	120-Packaging 1 - Pick Kit	5163504
D4385-1	Placard	2 pcs (2 ea)	120-Packaging 1 - Pick Kit	5059493X1
MS20426AD3-3	Rivet	135 Ea (135 ea)	120-Packaging 1 - Pick Kit	5018535
MS20426AD4-3	Rivet	140 Ea (140 ea)	120-Packaging 1 - Pick Kit	51197597-7
MS20470AD3-3	Rivet, Universal Head	25 Ea (25 ea)	120-Packaging 1 - Pick Kit	516941
MS20470AD4-3	Rivet, Universal Head	90 Ea (90 ea)	120-Packaging 1 - Pick Kit	5080639
MS21042L3	Nut	24 Ea (24 ea)	120-Packaging 1 - Pick Kit	5166712
MS21059L3	Nut Plate	4 Ea (4 ea)	120-Packaging 1 - Pick Kit	5168249
MS21069L08	Anchor Nut	8 Ea (8 ea)	120-Packaging 1 - Pick Kit	5102587-40
MS21069L3	Anchor Nut	34 Ea (34 ea)	120-Packaging 1 - Pick Kit	5158310
MS21071L08	Anchor Nut	1 Ea (1 ea)	120-Packaging 1 - Pick Kit	5102587-40
MS21071L3	Anchor Nut	3 pcs (3 ea)	120-Packaging 1 - Pick Kit	5055950
NAS1149F0332P	Washer	92 Ea (92 ea)	120-Packaging 1 - Pick Kit	5150462X22, 5167104X20
D412-711-101	Replacement Vertical Reference Window	1 pcs (1 ea)	130-QC 4	5196652
D412-761-043	Modified Latch Mechanism, LH - Vertical Reference	1 pcs (1 ea)	130-QC 4	5205642

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
120-Packaging 1 - Pick Kit	AN3-12A	1	260	0
	AN3-3A	22	271	0
	AN3-4A	20	668	0
	AN3-6A	26	345	0
	CR3242-4-2	34	201	0
	D3802-1-120	1	0	0
	D4165-1	1	3	0
	D4165-11	1	2	0
	D4165-3	1	1	0
	D4165-5	1	0	0
	D4165-7	1	0	0
	D4165-9	1	0	0
	D4207-1	1	4	0
	D4207-3	1	5	0
	D4269-1	1	1	0
	D4269-3	1	4	0
	D4269-5	1	4	0
	D4269-7	1	3	0
	D4324-011	1	1	0
	D4327-1	1	6	0
	D4327-3	1	5	0
	D4385-1	2	13	0
	MS20426AD3-3	135	7,720	0
	MS20426AD4-3	140	2,545	0
	MS20470AD3-3	25	6,114	0
	MS20470AD4-3	90	4,206	0
	MS21042L3	24	3,387	0
	MS21059L3	4	327	0
	MS21069L08	8	349	0
	MS21069L3	34	202	0
	MS21071L08	1	137	0
	MS21071L3	3	64	0
	NAS1149F0332P	92	5,207	0
130-QC 4	D412-711-101	1	1	0
	D412-761-043	1	1	0
Part Specifications				
Specifications could not be found.				

Plex 4/25/19 10:02 AM Dart.lajeunesse.marie

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					

QTY -011	QTY -013	QTY -015	QTY -017	QTY -019	QTY -021	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
X								D412-711-011	VERTICAL REFERENCE DOOR INSTALLATION, 212/412
	X							D205-711-013	VERTICAL REFERENCE DOOR INSTALLATION, 205/210
		X						D204-711-015	VERTICAL REFERENCE DOOR INSTALLATION, 204
			X					D214-711-017	VERTICAL REFERENCE DOOR INSTALLATION, 214
				X				D212-711-019	VERTICAL REFERENCE DOOR EAGLE SINGLE
					X			D412-711-021	VERTICAL REFERENCE DOOR KIT
A ₁	A ₁	A ₁	A ₁	A ₁		X		D412-711-041	VERTICAL REFERENCE DOOR ASSEMBLY
							X	D412-711-043	SNAP VENT KIT
					1	1		D412-761-043	MODIFIED LATCH MECHANISM KIT, LH (REPLACES EA20469-23/-24/-25)
					1	1		D412-711-101	REPLACEMENT WINDOW (REPLACES EAGLE P/N EB212-100L / EA20469-3)
					1	1		D3802-1-120	RUBBER STRIP
							2	D3932-1	SNAP VENT
					1	1		D4165-1	DOUBLER
					1	1		D4165-3	DOOR INNER SKIN (REPLACES EA20469-18)
					1	1		* D4165-5	AFT RIB (REPLACES EA20469-34)
					1	1		** D4165-7	FWD RIB (REPLACES EA20469-31)
					1	1		D4165-9	ANGLE (REPLACES EA20469-17)
					1	1		D4165-11	DOOR COVER PANEL (REPLACES EA20469-21)
					1	1		D4207-1	WINDOW RETAINER (REPLACES EA20469 -14)
					1	1		D4207-3	WINDOW (REPLACES EA20469-13)
					1	1		* D4269-1	ANGLE (REPLACES EA20469-33)
					1	1		** D4269-3	ANGLE (REPLACES EA20469-30)
					1	1		** D4269-5	ANGLE (REPLACES EA20469-29)
					1	1		* D4269-7	ANGLE (REPLACES EA20469-32)
					1	1		D4324-011	ARM REST ASSEMBLY (REPLACES EA20469-16)
					1	1		D4327-1	ANGLE (REPLACES EA20469-11)
					1	1		D4327-3	ANGLE (REPLACES EA20469-07)
					2	2		D4385-1	PLACARD

* PART OF EA20469-10 REAR RIB ASSEMBLY

** PART OF EA20469-12 FWD RIB ASSEMBLY

APPROVED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	MB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	DRAWING NO.	REV. L
MFG. APPR.	N/A	D412-711	SHEET 2 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	VERTICAL REFERENCE DOOR	NTS
DATE	17.01.20	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

QTY -011	QTY -013	QTY -015	QTY -017	QTY -019	QTY -021	QTY -041	PART NUMBER	DESCRIPTION
					22	22	AN3-3A	BOLT
					20	20	AN3-4A	BOLT
					26	26	AN3-6A	BOLT
					1	1	AN3-12A	BOLT
					92	92	NAS1149F0332P	WASHER (OR AN960-10L)
					34	34	CR3242-4-2	RIVET
					135	135	MS20426AD3-3	RIVET
					140	140	MS20426AD4-3	RIVET
					25	25	MS20470AD3-3	RIVET
					90	90	MS20470AD4-3	RIVET
					24	24	MS21042L3	NUT
					4	4	MS21059L3	NUT PLATE
					34	34	MS21069L3	NUT PLATE
					8	8	MS21069L08	NUT PLATE
					3	3	MS21071L3	NUT PLATE
					1	1	MS21071L08	NUT PLATE
						1	204-030-853-125	LH COPILOT DOOR (204-030-853-137/-155)
1							D412-711-111	WIRING HARNESS, 212/412
^B 1							^B D4268-043	INSTRUMENT PANEL, 212/412 (REPLACES EA20469-15-412)
	1						D205-711-113	WIRING HARNESS, 205
	^B 1						^B D4268-041	INSTRUMENT PANEL, 205 (REPLACES EA20469-15-205)
		1					D204-711-115	WIRING HARNESS, 204
		^B 1					^B EA20469-15-204	INSTRUMENT PANEL, 204
			1				D214-711-117	WIRING HARNESS, 214
			^B 1				^B EA20469-15-214	INSTRUMENT PANEL, 214
				1			D212-711-119	WIRING HARNESS, EAGLE SINGLE
				^B 1			^B D4268-047	INSTRUMENT PANEL, EAGLE SINGLE

- (A) IF CUSTOMER PREFERS TO SUPPLY AND MODIFY THEIR OWN DOOR, D412-711-021 SHOULD BE SUPPLIED IN LIEU OF D412-711-041
(B) INSTRUMENT PANEL INCLUDED WITH HARNESS ABOVE

NOTES

1) WIRING HARNESSES:

For Bell 204/205/210 Wiring Harnesses, use drawing D2046904.
For Bell 212 Wiring Harnesses, use drawing D2046903*.
For Bell 214 Wiring Harnesses, use drawing D214-761-511.
For Bell 412 Wiring Harnesses, use drawing D412-711-901.
For Bell 212 modified per SH07-28/SR02831NY use D212-761-224
or D212-761-225 depending on aircraft s/n.

* Despite the note on the drawing, D2046903 is applicable to all 212 aircraft serial numbers

Wiring Harnesses will vary depending on aircraft s/n.

2) D412-711-101 REPLACEMENT WINDOW:

To increase downward viewing clarity, it is acceptable to cut a small section from the replacement window on its downward side per Figure 1 of this document. The cutout can be a maximum of 9.00" wide x 17.00" long (229mm x 432mm), measured along the profile of the replacement window. The corners of the cutout must have a minimum radius of 2" (50mm). The cutout should be located at least 1.0" (25mm) from the flange. The actual shape of the cutout can vary as desired, as long as the overall dimensions are within the specified limits. See Figure 1 for reference.

3) D412-711-043 SNAP VENT KIT:

It is acceptable to install a total of up to 2X D3932-1 Snap Vents (available from Dart) onto the D412-711-101 Replacement Window to provide ventilation into the cabin. Refer to Figure 1 for acceptable locations and size of cutouts.

4) It is acceptable to use MS21042L3 nuts to install the window in lieu of anchor nuts shown on D2046901.

APPROVED

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MFG. APPR.	N/A	D412-711	SHEET 3 OF 6
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	VERTICAL REFERENCE DOOR NTS	
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